EXPRESS ENGINEERING SOLUTIONS

No one can de-code the code like us...!!

HEAT EXCHANGER AND PVELITE SOFTWARE TRAINING

Code Understanding was never so easy...!!

Index

Description	Basic (42 HRS)	Adv (52) HRS
Introduction	6	6
TEMA	6	10
ASME UHX	8	8
PDS/HTRI reports	2	2
Bolt Torque	0	2
PvElite & WRC	10	20
Q & A	10	10

Prerequisites: Candidate Should be Well Conversant with ASME Section VIII Div. 1 Code or Should Have Completed Basic / Advance ASME BPVC Training Course.

Lecture no 1 : Introduction to	Hrs	Basic (42 HRS)	Adv (52) HRS
■ Heat Exchanger Types ■ Significance of each type of heat exchanger	6	✓	✓

Lecture no 2 : TEMA	Hrs	Basic (42 HRS)	Adv (52) HRS
■ Nomenclature ■ Bundle pulling loads (Horizontal Units) ■ Bolt Tightening Sequence ■ Scope-TEMA ■ Definitions of • Design Pressure • Standard Test • Pneumatic test • Metal temperatures • Corrosion allowances ■ Tube Pattern ■ Tube Pitch ■ Minimum shell and cover thickness ■ Baffle Types and cuts	6	✓	✓

■ Baffle clearances ■ Baffle Thicknesses ■ Longitudinal baffles thickness calculations ■ Maximum Unsupported Tube spans/ For U-bends ■ Impingement plate requirement and entrance areas ■ Tie Rod size and Numbers ■ Gaskets ■ Tube sheet Thicknesses ■ Tube Hole Diameters and clearances ■ Tube Hole grooving ■ Tube –Tube sheet Joints ■ Minimum thickness of Channel covers ■ Minimum Inside Depth ■ Pass partition plate thickness ■ Bolt Spacing	—	—	—
■ Entrance and exit areas ■ Bypass Sealing arrangement ■ Flow induced vibration ■ Design considerations for vibration	4	✗	✓

Lecture no 3 : ASME UHX	Hrs	Basic (42 HRS)	Adv (52) HRS
■ Scope ■ Terminology ■ Condition of applicability ■ Rules for the design of Fixed tubesheets ■ Concept of shell bands	8	✓	✓

Lecture no 4: PDS/HTRI reports	Hrs	Basic (42 HRS)	Adv (52) HRS
■ Understanding of PDS/HTRI report ■ Important parameteres from Mechanical design Point of view	2	✓	✓

Lecture no 5: Bolt Torque	Hrs	Basic (42 HRS)	Adv (52) HRS
■ Bolt Tightening torque calculations	2	✗	✓

Lecture no 6: PvElite & WRC	Hrs	Basic (42 HRS)	Adv (52) HRS
■ Introduction to PvElite ■ Modeling and design of BEM type (Fixed Tubesheet Design) ■ Modeling and Design of U tube heat exchanger (BEU) ■ Modeling of Expansion joint as per Mandatory Appendix 26 Of ASME	10	✓	✓

Lecture no 6: PvElite & WRC	Hrs	Basic (42 HRS)	Adv (52) HRS
■ Modeling and Design of Floating head heat exchanger (AES) ■ Concept OF WRC and Attachment Parameters ■ Design Procedure for Stacked Heat Exchanger ■ De-rating of flanges as per UG-44	10	✗	✓
Lecture no 7: Q & A	**Hrs**	**Basic (42 HRS)**	**Adv (52) HRS**
■ Live Online Question and answer sessions after every topic	10	✓	✓

◆ Thank You ◆

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